

ABSTRACT

The process time required for fluorine doping of porous silica bodies to produce fluorine doped preforms for the manufacture of depressed index optical fibers is reduced by separating the doping step into a predeposit step, where “excess” fluorine is deposited on the silica particles, and a drive-in step where atomic fluorine is distributed into the silica particles. The drive-in step is conveniently combined with the sintering or consolidation step to further enhance the efficiency of the doping process.